Date: Tue, 28 Dec 93 04:30:35 PST

From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>

Errors-To: Ham-Space-Errors@UCSD.Edu

Reply-To: Ham-Space@UCSD.Edu

Precedence: Bulk

Subject: Ham-Space Digest V93 #125

To: Ham-Space

Ham-Space Digest Tue, 28 Dec 93 Volume 93 : Issue 125

Today's Topics:

P3D Frequencies Preliminary
Post your Sat-Track software pick here (2 msgs)
Satel Tracking Software (2 msgs)
SatTrack 1.7 / Xsat / Xephem / SFS

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 27 Dec 1993 09:52:43 -0700

From: library.ucla.edu!europa.eng.gtefsd.com!darwin.sura.net!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu

Subject: P3D Frequencies Preliminary

To: ham-space@ucsd.edu

SB SAT @ AMSAT \$ANS-361.01 PHASE-3D FREQUENCIES

HR AMSAT NEWS SERVICE BULLETIN 361.01 FROM AMSAT HQ SILVER SPRING, MD DECEMBER 27, 1993
TO ALL RADIO AMATEURS BT

BID: \$ANS-361.01

PHASE-3D FREQUENCIES PRELIMINARY

This bulletin is to correct an error appearing in ANS Bulletin ANS-359.01 PHASE-3D FREQUENCIES.

While that bulletin's subtitle indicated that these frequencies are "solidified" for Phase-3D, actually, they are preliminary and comments on specific selections are welcome and will be considered.

Please post any comments via AMSAT.ORG to ON6UG, with a copy to W3XO, by January 31, 1994

/EX

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Date: Tue, 28 Dec 1993 01:02:51 GMT

From: dog.ee.lbl.gov!newshub.nosc.mil!news!usenet@network.ucsd.edu

Subject: Post your Sat-Track software pick here

To: ham-space@ucsd.edu

Re: Satelite tracking software for PCs and Macs but no compromises.

I'm sure this has been asked before I read this group, but I am still needing the information. There was interesting discussion of the satelite tracking software for X-windows like machines or unix boxes with VT100's (ugh!!) but what about the rest of us. I have no intention of ever using a unix box for satelite tracking, but I might find a PC (or dare I get greedy and hope for a Mac with a large color display) available. I've seen some line based output for PCs with EGA, and one less than satisfactory program for the PC with VGA, but I'd like a really good tracking program - one that has plenty of features, plenty of support, can be customized, and provides control for tracking antennas and predictive displays. I want it all, and I want to pay share-ware prices for it. Well I want it all anyway. I'm willing to pay my-share prices.

What is the short list of software to consider for Macs and PCs with VGA and possibly (bleh..) MS Windows?

Please post replies as I'm confident others will want to see, and I'll just have to ask you permission to post your replies to me. Let's just have the discussion on the usenet, OK?

Roger Keating - KD6EFQ

Roger Keating, Cognitive Engineer PS&E keating@nosc.navy.mil | KD6EFQ
Naval Command, Control and Ocean Surveillance Center RDTE DIV | VHF DX is
NRaD Advanced Afloat System HCI - Code 44209 | Fun!
53245 Patterson Rd, San Diego CA 92152-7150 USA | Try it.

-----

Date: Tue, 28 Dec 1993 05:05:09 GMT

From: netcomsv!netcom.com!fmitch@decwrl.dec.com Subject: Post your Sat-Track software pick here

To: ham-space@ucsd.edu

Roger Keating (keating@manta.nosc.mil) wrote:

- : Re: Satelite tracking software for PCs and Macs but no compromises. <much deleted>
- : What is the short list of software to consider for Macs and PCs with : VGA and possibly (bleh..) MS Windows?
- : Please post replies as I'm confident others will want to see, and I'll : just have to ask you permission to post your replies to me. Let's just
- : have the discussion on the usenet, OK?

: Roger Keating - KD6EFQ

: Roger Keating, Cognitive Engineer PS&E keating@nosc.navy.mil | KD6EFQ : Naval Command, Control and Ocean Surveillance Center RDTE DIV | VHF DX is : NRaD Advanced Afloat System HCI - Code 44209 | Fun!

: 53245 Patterson Rd, San Diego CA 92152-7150 USA | Try it.

## the short list includes:

instatrack @~\$50 from amsat-na, worth every penny, and will interface with the kansas city tracker board for az/el rotor control... has room for 200 satellites, very easy to use... for price, is as impressive as any commercial software i have ever bought...

realtrak - @~\$65 from author or from r. myers communications... very good but skewed toward moon bounce operators... author very accessable (was at dayton) and very good upgrade policy.. also will control rotors...

quiktrak - written by software guru who lurks the net here, n4hy... very good but now getting a little dated... what about it bob??? i'm not sure about current pricing but i think it is available from amsat-na ...

trakbox - well, not a pc type program but a stand alone controller available as a kit from tapr, has lcd display, you download keps via serial port and it does the rest... tracks, controls az/el, automatically switches to sat as it becomes visable at your qth and you can prioritize which sat it will look at if more than one is visable (and with what seems

like a new sat going online every month, there are lots of 'em visable at the same time)... price is ~\$175 from tapr, they will have new batch of kits available in feb, contact them on the net tapr.org the trakbox was jointly developed by tapr and jamsat (japanese amsat) with much assistance from jack, wa4ejr@tapr.org (tell him mitch sent you)...

you can't go wrong with any of the above!!! my trakbox is almost ready... i got tired of my computer being tied up tracking and the aggravation of trying to get tracking, satellite sequencing, and pg/pb all running at the same time under desqview... with the trakbox doing the tracking/sequencing of my antennas it should be much easier to get pg/pb properly sequenced for \*completely\* (well, almost) unattended pacsat operation... (and i wouldn't have sold my dsp-2232 if i had known aea was trying to fix the dsp-2232/pg timing glitch)

any other comments???

mitch, wa4osr

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fmitch@netcom.com

Felton "Mitch" Mitchell, WA40SR in Mobile, Alabama USA 205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX co-sysop for W4IAX bbs running fbb ... sysop for WA40SR DXCluster in Mobile..

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Date: Mon, 27 Dec 1993 18:58:57 GMT

From: netcomsv!netcom.com!slegrand@decwrl.dec.com

Subject: Satel Tracking Software

To: ham-space@ucsd.edu

Bob Kupiec (bob@olwejo.UUCP) wrote:

- : In <2f2r9b\$nc3@hip-hop.sbay.org>, benjie@hip-hop.sbay.org writes:
- : >I am getting interested in satel tracking, and I would like
- : >suggestions on what tracking shareware I should get.
- : For a UNIX system, (or possibly any computer with a good C compiler
- : i.e. gcc) SatTrack 1.7 was just released. So far, it's the best
- : freely-available tracking software I've found for UNIX. SatTrack does
- : not use X, but vt100 screen mapping.
- : It's the best UNIX, free, non-X satellite tracker there is.

```
: If anyone's seen better, feel free to let me know!
: --
     Bob Kupiec, N3MML
                             Internet: bob@zero.com
  Morrisville, PA, USA
                                  (or) kupiec@jvnc.net
                         AX.25: n3mml@wb3ftp.#epa.pa.usa.noam
   40d12'N 74d49'W +110ft
  "Motorola 68k Inside!"
                            PGP key 1F9C51 available ~ Get WiReD
Is there any good freely distributable tracking programs that use X?
BTW, What is the home ftp site for SatTrack?
*****************************
* Shawn P. Legrand
                            * The scientist does not study nature
* Sr. Systems Programmer
                           * because it is useful; he studies it
                            * because he delights in it, and he
* ICW
                            * delights in it because it is beautiful. *
* (619)-546-2457
                                           - Henri Poincare
* INTERNET: slegrand@netcom.com
* IBMMAIL: USICWSPI
****************************
*****************************
* Shawn P. Legrand
                            * The scientist does not study nature
* Sr. Systems Programmer
                       * because it is useful; he studies it
* ICW
                            * because he delights in it, and he
* (619)-546-2457
                            * delights in it because it is beautiful.
* INTERNET: slegrand@netcom.com
                                           - Henri Poincare
* IBMMAIL: USICWSPI
*****************************
_____
Date: Mon, 27 Dec 1993 20:25:23 GMT
From: yeshua.marcam.com!zip.eecs.umich.edu!umn.edu!msc.edu!vulcan.iss.bnr.com!
vulcan!tgb@uunet.uu.net
Subject: Satel Tracking Software
To: ham-space@ucsd.edu
>
>Is there any good freely distributable tracking programs that use X?
>BTW, What is the home ftp site for SatTrack?
Try xsat for X windows.
$ archie -s xsat
```

Host gatekeeper.dec.com

```
Location: /.9/X11/contrib
          FILE -r--r--
                              4173 Apr 10 1992 xsat.README
          FILE -r--r-- 1647479 Apr 10 1992 xsat1.0.tar.Z
Host harbor.ecn.purdue.edu
   Location: /pub/davy
          FILE -r--r--
                          1647479 Apr 9 1992 xsat1.0.tar.Z
Host pdq.coe.montana.edu
   Location: /pub/mirrors/X11-contrib
          FILE -rw-r--r--
                              1973 Apr 8 1992 xsat.README.gz
          FILE -rw-r--r-- 1059650 Mar 28 1993 xsat1.0.tar.gz
Host sunsite.unc.edu
   Location: /pub/X11/contrib
          FILE -rw-r--r--
                              4173 Sep 8 1992 xsat.README
          FILE -rw-r--r- 1647479 Sep 8 1992 xsat1.0.tar.Z
Host cs.columbia.edu
   Location: /archives/mirror1/X11R5/contrib
          FILE -rw-rw-r--
                              4173 Apr 9 1992 xsat.README
          FILE -rw-rw-r--
                          1062429 Apr 9 1992 xsat1.0.tar.gz
Host dimacs.rutgers.edu
   Location: /pub/workshop/avg
                           81920 Oct 10 09:25 maxsatJul30
          FILE -rwxr-xr-x
Host ftp.cs.umn.edu
   Location: /pub/X/contrib
          FILE -r--r--
                              4173 Apr 9 1992 xsat.README
          FILE -r--r-- 1647479 Apr 9 1992 xsat1.0.tar.Z
Host ftp.germany.eu.net
   Location: /X11/contrib
          FILE -r--r--
                              4173 Apr 10 1992 xsat.README
          FILE -r--r-- 1647479 Apr 10 1992 xsat1.0.tar.Z
Host ftp.luth.se
```

4173 Apr 10 1992 xsat.README

FILE -r--r-- 1647479 Apr 10 1992 xsat1.0.tar.Z

Location: /pub/X11/contrib FILE -r--r--

```
Host ftp.msen.com
```

Location: /pub/gopher/stuff/stuff.old/sci.all FILE -rw-rw-r-- 3437 Apr 15 1992 .xsat.announce

Host ftp.sunet.se

Location: /pub/X11/contrib

FILE -r--r-- 4173 Apr 9 1992 xsat.README FILE -r--r-- 1647479 Apr 9 1992 xsat1.0.tar.Z

Host ftp.uu.net

Location: /pub/window-sys/X/contrib

FILE -rw-r--r-- 2479 Apr 9 1992 xsat.README.Z
DIRECTORY drwxr-xr-x 512 Nov 19 1992 xsat1.0.tar.Z-split

Host ftp.wustl.edu

Location: /packages/X11R5/contrib-pub

FILE -r--r-- 4173 Apr 8 1992 xsat.README FILE -r--r-- 1647479 Apr 8 1992 xsat1.0.tar.Z

- -

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How many software patents have you infringed upon today? tgb@bnu003.cncc.bnr.com home bnu002.uucp!tommyb!tom@bnu003.bnr.com

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Date: Mon, 27 Dec 1993 22:27:11 GMT

From: swrinde!cs.utexas.edu!howland.reston.ans.net!newsserver.jvnc.net!jvnc.net!

kupiec@network.ucsd.edu

Subject: SatTrack 1.7 / Xsat / Xephem / SFS

To: ham-space@ucsd.edu

Since a few people have sent email wondering where SatTrack 1.7 can be found. It's at at ucsd.edu, dir "hamradio/packet/tcpip/incoming".

Again SatTrack is a realtime satellite tracker that uses vt100 screen mapping. You don't need X11 or curses.

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Now onto more interesting questions. ;-) Has anyone stipped Xsat down to use just it's Postscript mapping? I want to run Xsat on a non-X workstation and print the Postscript maps. I guess I could

hack at the code again, but I'm wondering if someone has done it already.

The reason being I'm using all of the programs mentioned in the Subject: header and each of them has useful features. Does somebody want to combine all of them and save me a whole bunch of work? ;-)

Xsat: uses N3EMO's "orbit" to generate Postscript tracking maps

SatTrack: provides real-time data on a satellite

SFS (Space Flight Simulator): Has a nice X display, somewhat like on

NASA Select TV

Xephem: Can track earth satellites in real-time, but meant for

planets/stars.

- -

Bob Kupiec Email: kupiec@jvnc.net JvNC (GES, Inc.)
Network Operations Ham: N3MML 3 Independence Way
Phone: 609-897-7319 Fax: 609-897-7310 Princeton, NJ 08540

-----

Date: Mon, 27 Dec 93 15:14:00 PST From: almaden.ibm.com@uunet.uu.net

To: ham-space@ucsd.edu

 ${\tt References~<2f2r9b\$nc3@hip-hop.sbay.org>,~<CIDC60.CtA@olwejo.UUCP>,}$ 

<slegrandCIpJEB.1Kx@netcom.com>

Reply-To : inote

Subject : What was the first major use of PRML signal processing scheme?

I'm helping a magazine editor check some facts in a draft article on digital-read disk drives and thought someone here might be able to help with one of his questions:

What was the first significant application of the PRML (partial-response/maximum likelihood) digital signal processing technique?

The editor understands that it was in the communication setup with deep space probes (such as the Viking Lander). True? If not, what were earlier examples?

Unfortunately, the magazine's deadline is Tuesday, Dec 28. So a rapid reply (or pointer to a reference) would be greatly appreciated.

Many thanks,

Mike Ross

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Communications (PR)
Almaden Research Center
  Date: Mon, 27 Dec 1993 22:32:36 GMT
From: usc.edu!howland.reston.ans.net!newsserver.jvnc.net!jvnc.net!
kupiec@network.ucsd.edu
To: ham-space@ucsd.edu
References <2f2r9b$nc3@hip-hop.sbay.org>, <CIDC60.CtA@olwejo.UUCP>,
<slegrandCIpJEB.1Kx@netcom.com>
Subject : Re: Satel Tracking Software
In <slegrandCIpJEB.1Kx@netcom.com>, slegrand@netcom.com writes:
>Bob Kupiec (bob@olwejo.UUCP) wrote:
>: In <2f2r9b$nc3@hip-hop.sbay.org>, benjie@hip-hop.sbay.org writes:
>: >I am getting interested in satel tracking, and I would like
>: >suggestions on what tracking shareware I should get.
>
>: For a UNIX system, (or possibly any computer with a good C compiler
>: i.e. gcc) SatTrack 1.7 was just released. So far, it's the best
>: freely-available tracking software I've found for UNIX. SatTrack does
>: not use X, but vt100 screen mapping.
>BTW, What is the home ftp site for SatTrack?
I'm posting the release note for SatTrack 1.7 in case you have not
seen it.
Bob
Hello satellite enthusiasts,
```

the latest version of the satellite tracking program I've written for Unix machines is pretty much ready to be used. I hope most of the bugs have been found (at least the remaining ones ought to be of minor impact). You can get SatTrack from ucsd.edu (128.54.16.1). Do the following:

ftp ucsd.edu
login anonymous
cd hamradio/packet/tcpip/incoming
get sattrack.V1.7.tar.Z

Place this file into your Unix home directory, uncompress it, and then type 'tar xvpf sattrack.V1.7.tar'. This will unbundle the distribution file

and create all subdirectories that are necessary. Then look into the documentation file 'sattrack.doc' in SatTrack/Doc for instructions how to compile sattrack (and some other auxiliary programs). Please let me know how it works and if there are any bugs that I haven't encountered yet. It should compile perfectly on at least Sun-3's (SunOS 4.0.3) and SPARCstation IPCs (SunOS 4.1.1). Some machines require stdlib.h to be included. In this case comment out the line

#define SUNOS4

in sattrack.h before compilation. I hope this program is helpful to you.

73, Manfred --- W6/DL5KR

Manfred Bester Space Sciences Lab University of California Berkeley, CA 94720 (510) 642-8497

- -

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